#### **EXHIBIT A**

# **Upper Elk River Road Decommissioning Project**

Statement of Work

Under direction of the Department of Fish and Game, and under the following conditions and terms, the Trout Unlimited will:

- 1. Improve spawning and rearing habitat by reducing coarse and fine sediment delivery for coho and Chinook salmon, and steelhead and cutthroat trout in a selected section of Elk River tributary to Humboldt Bay in Humboldt County. The objective is to save 11,608 cubic yards of sediment from delivery by dispersing road runoff on 6.2 miles of road, reestablishing drainage patterns at 22 stream crossings and removing or stabilizing sediment from 13 sites along the alignment.
- 2. Conduct work on Elk River Watershed. The project is located in Township 03N, Range 01N, Sections11, 12, 14, 23, and 24 of the McWhinney Creek and Hydesville 7.5 Minute U.S.G.S. Quadrangles, north west coordinates latitude 40.659053°, longitude -124.040674°, north east coordinates latitude 40.659972°, longitude -124.006496°, south west coordinates latitude 40.622002°, longitude -124.040017°, south east coordinates latitude 40.622909°, longitude -124.021208° as depicted in Exhibit C, Project Location Map, which is attached and made part of this agreement by this reference.
- 3. Decommission 6.2 miles of road thereby saving 1,076 cubic yards of sediment from delivery to Elk River from the road surface. Approximately 9,146 cubic yards of stream crossing fill from approximately 22 stream crossings and 1,289 cubic yards of fill slope from 13 landslide and fillslope sites will be excavated and stored in stable locations. The following treatments will be implemented where appropriate:
  - Excavation of in-place stream crossings at locations where roads or landings were built across stream channels. This includes complete excavation of the fill, including the culvert or Humboldt log crossing so the original stream bed and side slopes are exhumed. A stream crossing excavation includes removing the culvert and the underlying and the adjacent fill material. Complete excavation of stream crossing fills, includes 100 year flood channel bottom widths and 2:1 or otherwise stable side slopes. When possible the excavated spoil will be stored at nearby stable locations where it will not erode. If there is a limited amount of stable storage locations at the excavation site the crossing fill material will be hauled off-site for storage.
  - Road surface treatments: 1) ripping of the surface of the road or landing using mechanical rippers to reduce surface runoff and improve revegetation; 2) in-place outsloping or the excavation of unstable side cast material that could fail and deliver sediment to a stream along the outside edge of a road prism or landing and the replacement of the spoil on the roadbed against the corresponding adjacent cutbank, or in close proximity of the site; 3) exported out-sloping which involves not placing the material against the cutbank so the material is end hauled to a spoil disposal site; 4) installation of cross drains or deep water bars at 50, 75, 100 or 200 foot intervals or as

- necessary at springs and seeps to disperse road surface runoff. The cross road drains provide road surface drainage and prevent the collection of concentrated runoff on the former roadbed.
- Seeding and mulching of all exposed soils which may deliver sediment to a stream.
   Woody debris will be concentrated on finished slopes adjacent to stream crossings.
   The standard for success is 80% ground cover for broadcast planting of seed, after a period of three years.
- 4. The Grantee will not proceed with on the ground implementation until all necessary permits and consultations are secured.
- 5. Sites which are expected to erode and deliver sediment to the stream are the only locations where work will be authorized for reimbursement under the terms of this agreement. Reimbursement will not be authorized for work done to improve aesthetics only.
- 6. Notify the Grant Manager a minimum of five working days before any fish bearing stream reaches are dewatered and the stream flow diverted. The notification will provide a reasonable time for Department personnel to supervise the implementation of the water diversion plan and oversee the safe removal and relocation of salmonids and other fish life from the project area. If the project requires dewatering of the site, and the relocation of salmonids, the Grantee will implement the following measures to minimize harm and mortality to listed salmonids:
  - Fish relocation and dewatering activities shall only occur between June 15 and October 31 of each year.
  - The Grantee shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible.
  - All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, *Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act*, June 2000.
  - The Grantee will provide fish relocation data to the Grant Manager on a form provided by the Department of Fish and Game.
  - Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
- 7. All road decommissioning will be done in accordance with techniques described in the *Handbook for Forest and Ranch Roads*, (PWA, 1994c.) and the *California Salmonid Stream Habitat Restoration Manual*, Third Edition, Volume II, Part X, January 2004. All road decommissioning and upgrade sites and techniques shall be approved by the Grant Manager before any equipment work takes place.
- 8. All habitat improvements will follow techniques described in the Third Edition, January 1998, of the *California Salmonid Stream Habitat Restoration Manual*, Flosi et al and the

California Salmonid Stream Habitat Restoration Manual, Third Edition, Volume II, Part XI, January 2004.

- 9. Work in flowing streams is restricted to June 15 through October 31. Actual project start and end dates, within this timeframe, are at the discretion of the Department of Fish and Game.
- 10. An annual report will be submitted each year, no later than November 15, detailing the work completed that field season. The annual report will include, but no necessarily be limited to the following where applicable:
  - Construction start and end dates
  - Percentage of the project completed in total to date
  - Dewatering and fish relocation data on DFG data sheet (to be provided by the DFG Grant Manager upon request)
  - Construction start and end dates for work to be implemented the following season

The annual report will also include on a site by site basis

- Road length segment decommissioned per road segment
- Sediment spoils volume estimate per road segment
- Upslope stream crossings decommissioned (not for fish passage)
- Sediment volume prevented from entering the stream per crossing
- Sediment spoils volume estimate per crossing
- Upslope area treated (sq ft) (landslides, bank stabilization)
- 11. Upon completion of the project, the Grantee shall submit two hard copies of a final written report and one electronic, *Microsoft Word* compatible, copy on CD. The report shall include, but not necessarily be limited to the following information:
  - Grant number
  - Project name
  - Geographic area (e.g., watershed name)
  - Location of work show project location using U.S.G.S. 7.5 minute topographical map or appropriately scaled topographical map
  - Geospatial reference/location (lat/long is preferred defined as point, line, or polygon)
  - Project start and end dates and the number of person hours expended
  - Total of each fund source, by line item, expended to complete the project, breaking down Grant dollars, by line item, and any other funding, including type of match (cash or in-kind service)
  - Expected benefits to anadromous salmonids from the project
  - Labeled before and after photographs of restoration activities and techniques

- Specific project access using public and private roads and trails, with landowner name and address
- A description and analysis of the restoration and planning techniques used
- A description of the results of the project
- Complete as built project description, including proposed and as-built road logs
- GIS and GPS data
- Report measurable metrics for the project by responding to the restoration project metrics listed below.

# **Habitat Protection and Restoration Projects**– **Reporting Metrics** (HU) (Report N/A to those that do not apply)

## Habitat Projects: (all)

- Identify the watershed/sub-basin plan or assessment in which the project is identified as a priority.
- Name the priority habitat limiting factors identified in that plan that are addressed by the project
- Type of monitoring included in the project
  - o Design spec achieved
  - o Fish movement/abundance
- Number of stream miles treated/affected by the project within the project boundaries.

### Upland Habitat Projects (HU)

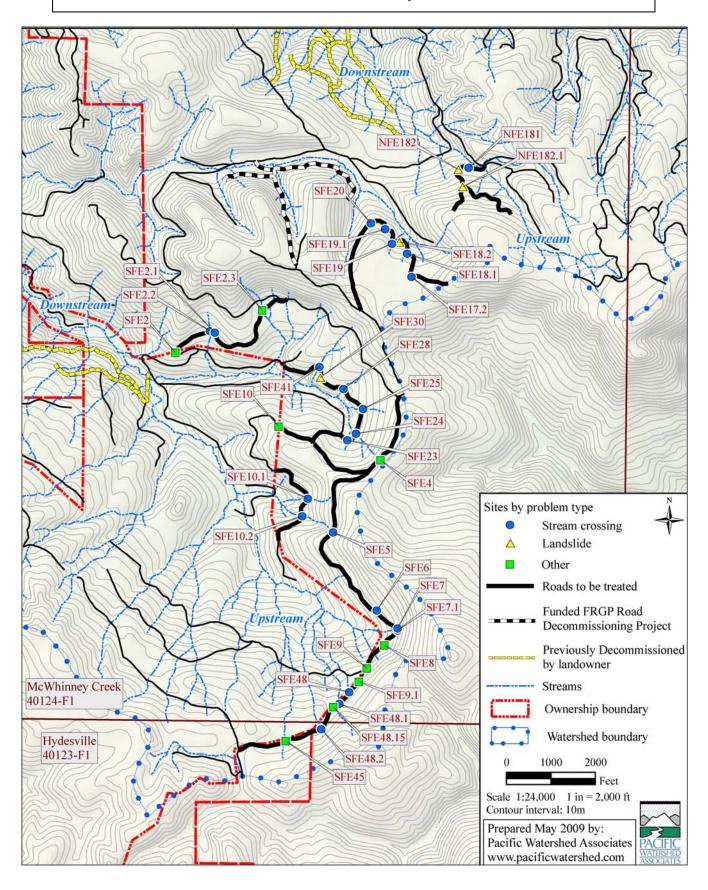
- Number of actions (road decommission / upgrade)
- Total acres of upslope area treated.
- Total miles of road treated.
- Miles of road treated for road drainage system improvements.
- Miles of road decommissioned.
- Number of cubic yards of sediment saved from entering the stream.

### Riparian Habitat Projects (HR, HS)

- Miles of stream treated overall, count stream reach only once.
- Miles of riparian stream bank treated, measure both sides of the bank.
- Total acres of riparian area treated.
- Acres of riparian area planted.
- Species scientific names of plants planted.
- 12. The Grantee will acknowledge the participation of the Department of Fish and Game, Fisheries Restoration Grant funds on any signs, flyers, or other types of written communication or notice to advertise or explain the Upper Elk River Road Decommissioning Project.

# Exhibit C Upper Elk River Road Decommissioning Project Project Location Map

T03N, R01N, S11, 12, 14, 23, and 24, McWhinney Creek and Hydesville Quads Humboldt County



	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	California clapper rail Rallus longirostris obsoletus	ABNME05016	Endangered	Endangered	G5T1	S1	
2	California globe mallow Iliamna latibracteata	PDMAL0K040			G3	\$2.2	1B.2
3	Cooper's hawk Accipiter cooperii	ABNKC12040			G5	S3	
4	Del Norte salamander Plethodon elongatus	AAAAD12050			G4	S3	SC
5	Howell's montia Montia howellii	PDPOR05070			G3G4	S3	2.2
6	Humboldt Bay owl's-clover Castilleja ambigua ssp. humboldtiensis	PDSCR0D402			G4T2	S2.2	1B.2
7	Humboldt Bay wallflower Erysimum menziesii ssp. eurekense	PDBRA160E2	Endangered	Endangered	G3?T1	S1.1	1B.1
8	Humboldt marten Martes americana humboldtensis	AMAJF01012			G5T2T3	S2S3	SC
9	Kneeland Prairie pennycress Thlaspi californicum	PDBRA2P041	Endangered		G1	S1.1	1B.1
10	Lyngbye's sedge Carex lyngbyei	PMCYP037Y0			G5	S2.2	2.2
11	Norris' beard moss Didymodon norrisii	NBMUS2C0H0			G2G3	S2.2	2.2
12	Northern Coastal Salt Marsh	CTT52110CA			G3	S3.2	
13	Oregon coast paintbrush Castilleja affinis ssp. litoralis	PDSCR0D012			G4G5T4	S2.2	2.2
14	Oregon goldthread  Coptis laciniata	PDRAN0A020			G4G5	S2.2	2.2
15	Oregon polemonium  Polemonium carneum	PDPLM0E050			G4	S1	2.2
16	Pacific fisher  Martes pennanti (pacifica) DPS	AMAJF01021	Candidate	unknown code	G5	S2S3	SC
17	Pacific gilia Gilia capitata ssp. pacifica	PDPLM040B6			G5T3T4	S2.2?	1B.2
18	Pacific tailed frog Ascaphus truei	AAABA01010			G4	S2S3	SC
19	Point Reyes bird's-beak Cordylanthus maritimus ssp. palustris	PDSCR0J0C3			G4?T2	S2.2	1B.2
20	Siskiyou checkerbloom Sidalcea malviflora ssp. patula	PDMAL110F9			G5T1	S1.1	1B.2
21	Sonoma tree vole Arborimus pomo	AMAFF23030			G3	S3	SC
22	Townsend's big-eared bat Corynorhinus townsendii	AMACC08010			G4	S2S3	SC
23	Upland Douglas Fir Forest	CTT82420CA			G4	S3.1	
24	Whitney's farewell-to-spring  Clarkia amoena ssp. whitneyi	PDONA05025			G5T2	S2.1	1B.1

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
25	Wolf's evening-primrose Oenothera wolfii	PDONA0C1K0			G1	S1.1	1B.1
26	Yuma myotis  Myotis yumanensis	AMACC01020			G5	S4?	
27	alpine marsh violet  Viola palustris	PDVIO041G0			G5	S1S2	2.2
28	bald eagle Haliaeetus leucocephalus	ABNKC10010	Delisted	Endangered	G5	S2	
29	beach layia  Layia carnosa	PDAST5N010	Endangered	Endangered	G2	S2.1	1B.1
30	bensoniella Bensoniella oregona	PDSAX02010		Rare	G3	S2.2	1B.1
31	black-crowned night heron Nycticorax nycticorax	ABNGA11010			G5	S3	
32	bristle-stalked sedge Carex leptalea	PMCYP037E0			G5	S2?	2.2
33	chinook salmon - California coastal ESU Oncorhynchus tshawytscha	AFCHA0205S	Threatened		G5	S1	
34	coast cutthroat trout Oncorhynchus clarkii clarkii	AFCHA0208A			G4T4	S3	SC
35	coast fawn lily  Erythronium revolutum	PMLIL0U0F0			G4	S3	2.2
36	coast sidalcea Sidalcea oregana ssp. eximia	PDMAL110K9			G5T1	S1.2	1B.2
37	coastal marsh milk-vetch Astragalus pycnostachyus var. pycnostachyus	PDFAB0F7B2			G2T2	S2.2	1B.2
38	dark-eyed gilia Gilia millefoliata	PDPLM04130			G2	S2.2	1B.2
39	double-crested cormorant  Phalacrocorax auritus	ABNFD01020			G5	S3	
40	foothill yellow-legged frog Rana boylii	AAABH01050			G3	S2S3	SC
41	ghost-pipe  Monotropa uniflora	PDMON03030			G5	S2S3	2.2
42	giant fawn lily  Erythronium oregonum	PMLIL0U0C0			G5	S2.2	2.2
43	golden eagle  Aquila chrysaetos	ABNKC22010			G5	S3	
44	great blue heron  Ardea herodias	ABNGA04010			G5	S4	
45	great egret  Ardea alba	ABNGA04040			G5	S4	
46	green sturgeon Acipenser medirostris	AFCAA01030	Threatened		G3	S1S2	SC
47	hoary bat  Lasiurus cinereus	AMACC05030			G5	S4?	

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
48	leafy-stemmed mitrewort  Mitella caulescens	PDSAX0N020			G5	S4.2	4.2
49	long-beard lichen Usnea longissima	NLLEC5P420			G4	S4.2	
50	long-eared myotis  Myotis evotis	AMACC01070			G5	S4?	
51	long-legged myotis  Myotis volans	AMACC01110			G5	S4?	
52	maple-leaved checkerbloom Sidalcea malachroides	PDMAL110E0			G3G4	S3S4.2	4.2
53	marbled murrelet  Brachyramphus marmoratus	ABNNN06010	Threatened	Endangered	G3G4	S1	
54	marsh pea  Lathyrus palustris	PDFAB250P0			G5	S2S3	2.2
55	minute pocket moss Fissidens pauperculus	NBMUS2W0U0			G3?	S1.2	1B.2
56	northern clustered sedge  Carex arcta	PMCYP030X0			G5	S1S2	2.2
57	northern meadow sedge  Carex praticola	PMCYP03B20			G5	S2S3	2.2
58	northern red-legged frog Rana aurora	AAABH01021			G4T4	S2?	SC
59	northern spotted owl Strix occidentalis caurina	ABNSB12011	Threatened		G3T3	S2S3	SC
60	osprey Pandion haliaetus	ABNKC01010			G5	S3	
61	pallid bat  Antrozous pallidus	AMACC10010			G5	S3	SC
62	pink sand-verbena Abronia umbellata ssp. breviflora	PDNYC010N2			G4G5T2	S2.1	1B.1
63	robust monardella Monardella villosa ssp. globosa	PDLAM180P7			G5T2	S2.2	1B.2
64	running-pine <i>Lycopodium clavatum</i>	PPLYC01080			G5	S4.1	4.1
65	sandy beach tiger beetle  Cicindela hirticollis gravida	IICOL02101			G5T2	S1	
66	seacoast ragwort  Packera bolanderi var. bolanderi	PDAST8H0H1			G4T4	S1.2	2.2
67	seaside pea Lathyrus japonicus	PDFAB250C0			G5	S1.1	2.1
68	sharp-shinned hawk Accipiter striatus	ABNKC12020			G5	S3	
69	short-leaved evax Hesperevax sparsiflora var. brevifolia	PDASTE5011			G4T2T3	S2S3	1B.2
70	snowy egret  Egretta thula	ABNGA06030			G5	S4	

	Common Name/Scientific Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
71	southern torrent salamander Rhyacotriton variegatus	AAAAJ01020			G3G4	S2S3	SC
72	summer-run steelhead trout Oncorhynchus mykiss irideus	AFCHA0213B			G5T4Q	S2	SC
73	tidewater goby  Eucyclogobius newberryi	AFCQN04010	Endangered		G3	S2S3	SC
74	tricolored blackbird  Agelaius tricolor	ABPBXB0020			G2G3	S2	SC
75	western lily  Lilium occidentale	PMLIL1A0G0	Endangered	Endangered	G1	S1.2	1B.1
76	western pond turtle Actinemys marmorata	ARAAD02030			G3G4	S3	SC
77	western sand-spurrey Spergularia canadensis var. occidentalis	PDCAR0W032			G5T4?	S1.1	2.1
78	western snowy plover Charadrius alexandrinus nivosus	ABNNB03031	Threatened		G4T3	S2	SC
79	white-flowered rein orchid  Piperia candida	PMORC1X050			G3	S3.2	1B.2
80	white-footed vole  Arborimus albipes	AMAFF23010			G3G4	S2S3	SC